THE

EGYPTIAN DYNASTIES

OF

MANETHO.

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EGYPTIAN DYNASTIES OF MANETHO.

1. Few persons would probably hesitate to admit that if we possessed the chronological work of Manetho in its original form, we should have information on which we could reasonably depend as to the duration of each Egyptian dynasty, and as to the interval between its commencement and a fixed point of time, for at least as far back as the expulsion of the Hyk-Shôs. On the other hand, few persons would venture to assert that any of the lists of kings, with the durations of their respective reigns, which have been handed down to us as those of Manetho, can be depended on as really his. The discrepancy which everywhere exists between these lists appears to most persons a sufficient reason for rejecting the authority of them all. This being the case, it becomes a question, whether any certainty is attainable in respect to Egyptian chronology. It is vain to appeal to the monuments. I do not say this with reference to the scepticism which still exists as to there being *any* monumental evidence which can be depended on as properly interpreted. Scepticism like this can only exist where the grounds of hieroglyphical interpretation have not been properly investigated. I say however, advisedly, that we do not yet possess, and that it is extremely unlikely that we ever shall possess, such monumental evidence as would enable us to construct a chronological canon.

2. The chronological value of the evidence which we possess is extremely small. The Egyptian kings dated their public acts, not from any fixed epoch, but by the years of their respective reigns. In a few instances the interval between events which occurred in recorded regnal years of different kings is recorded also; and when this is the case we can compute the interval between their accessions. We know in this manner that Ahmôs the Saite came to the throne forty years after Nekau, and Pemi fifty-two years after Shishonk III. In a few other instances, where the reign of a king overlapped that of his successor, and where the regnal years of both the existing kings are recorded together, the interval between their accessions can also be determined. In this manner I ascertained, many years ago, that the first year of T'usortasen II. was the thirty-third of his father, Amen-em-hè II.; and that the first year of the latter was the forty-third of his grandfather, T'usortasen I., whom he succeeded. The number of cases, however, in which intervals between the commencement of reigns can be determined with accuracy by either of these methods is so extremely small, when

compared with the entire number of reigns, as, in place of encouraging us to hope for ultimate success in constructing a perfect canon, to lead us to despair of even approximating to its construction.

3. In a few instances, but a few only, genealogies exist which link together by a known number of generations an earlier and a later reign. We have it on record, for example, that in the thirty-seventh year of Shishonk IV., which must have been one of the very last years of the twenty-second dynasty, a tablet was erected by a person who was ninth in descent from Shishonk I., the founder of the dynasty. Assuming that Osorkon I., his ancestor in the eighth degree, was of the same age when his father became king as he himself was when he erected the tablet, the duration of the dynasty would be exactly measured by eight generations; and it could not be very much more or very much less than this.[a] There is, I believe, no instance in Egyptian history where a genealogical tablet gives such good chronological evidence as this; and yet how far is this from giving us accurate information! The dynasty lasted "*about* eight generations;" how many years should that be reckoned to be? In English history a generation has been on an average about 32 years. Between the birth of William the Conqueror and that of Queen Victoria, the twenty-fifth in descent from him, 792 years intervened. At this rate eight generations would occupy 253½ years. In ancient times and in eastern countries the average was less. The interval between the births of Rehoboam and Jeconiah, the sixteenth in descent from him, was about 416 years, giving 208 for the eight generations. The highest sum of eight consecutive generations in the line of Rehoboam is 244 years, the lowest, 195. The genealogy to which I have referred may be regarded as conclusive against those who, relying on the statements attributed to Manetho by Julius Africanus, make the duration of this dynasty only 120 or even 116 years; and it harmonizes well with the reading "202 years," which I will hereafter shew to have been what Manetho really made it; but I would not venture to rely on this genealogy as conclusive against the views of Lepsius and Bunsen, who, with the knowledge of what it contains, have assigned to the dynasty 174 and 176 years respectively. We may assume 25 years as a probable average for a generation;

[a] That Shishonk I. was not a very young man when he obtained the kingdom, and that Osorkon his son had then attained to man's estate, are evident from the monumentally-recorded fact (Nile statue, British Museum) that Osorkon, and not Shishonk himself, married the daughter of Psusennes, the last king of the twenty-first dynasty.

but even if the length of the dynasty had been accurately, instead of approximately, measured by eight generations, a large margin must be allowed on each side within which it might range without being decidedly at variance with what is stated in the genealogical inscription.

4. Neither is the evidence to be obtained from regnal dates to be implicitly relied on. Some persons seem to have thought that a chronological canon might be constructed by counting the highest regnal years of the successive kings which occur in the dates of tablets. But, on the one hand, we can never be sure that the highest date found is the highest that may have existed. The highest regnal year, for example, which has been found for Shishonk III. is his twenty-ninth year; and yet there is evidence, to which I have already adverted (§ 2), that he reigned fifty-two. On the other hand, in such cases of joint reigns as I have mentioned in the latter part of § 2, it is manifest that if the highest regnal years of all the kings were to be taken as the lengths of their reigns, the years in which two sovereigns reigned together would be counted twice over. Nor have we any right to assume that cases of this kind were few in number, or that the durations of these joint reigns were always small. There is a stèle at Leyden (V., 4) which has the double date of the fourty-fourth year of T'usortasen I. and the second of Amen-em-hè II. There is another tablet (Sharpe, i., 83) which appears to be dated in the following year, the third of Amen-em-hè II. No second date accompanies this, but king T'usortasen I. is mentioned in the body of the inscription, and his name is followed by the addition "May he live!" which characterizes living kings; while his father's name has the usual addition "who hath spoken truth (or been justified)," which is characteristic of the dead. In this instance I suppose no one would question that T'usortasen I. was still alive; yet in a similar instance in the twenty-second dynasty, the validity of this conclusion is strenuously denied. In the Karnac inscription (Lepsius' *Auswahl*, 15) dated in the eleventh year of Takelut, king Osorkon, the grandfather of his wife, and, as I take it, his own father, is mentioned with the very same addition "May he live!" I shall have to return to the consideration of this clause (see § 57). I will only remark here, that it is at least possible that king Osorkon was actually alive in the eleventh year after his son had begun to reign in conjunction with him; nor should I be surprised at the discovery of a document dated during these eleven years, bearing the names and years of both the kings, or the name and year of Osorkon alone.

5. Another source of error in computation by regnal years

is the possible existence of double epochs at which reigns may be reckoned to commence. There may be cases in Egyptian history analogous to what occurred in the time of James I., or Charles II. In the former instance, a king who had reigned for sixteen years in Scotland from his mother's death, became king of England, and reigned over both countries for twenty-two years more. A chronologer who, possessing no historical information, should take as his guide dated documents only, might discover from English documents that the first year of Charles I. was only twenty-two years after the first of James I., and might come to the blundering conclusion that the reign of Mary of Scotland terminated when that of Elizabeth really terminated. This hypothesis would, of course, destroy the earlier synchronisms between Scottish and English history; and it might then occur to our supposed chronologer that the best way of setting matters straight would be to strike off twenty years or so from the long reign of Elizabeth. Absurd as this mode of proceeding must appear to persons acquainted with English and Scottish history, its absurdity would not appear to one who had only a few detached documents before him, relating to private affairs, although dated by regnal years. What I have supposed that this chronologer might have done is exactly parallel to what our best Egyptologers have done. A document is discovered which proves that the reign of Tirhaka as king of *Egypt* (reckoning from the death of Seti III.) was only twenty-seven years before the first of Psamitik I.; the false inference is drawn that his reign as king of *Ethiopia* (reckoning from the death of Shebetok, which was fourteen years earlier) began twenty-seven years only before that of Psamitik I. The consequence of this false inference is, that the conquest of Egypt by Shebek is made to fall a good many years after the conquest of Samaria; and as Hoshea, the last king of Samaria, is said to have made an alliance with Shebek, the anachronism thus produced is removed, not (as it ought to have been) by adding to the Egyptian chronology the fourteen years which had been improperly omitted, but by striking off twenty years from the reign of Manasseh of Judah, which is considered sufficiently long to admit of this reduction! It goes for nothing with the gentlemen who have made this *correction*, forsooth, of Egyptian chronology, that in the second book of Kings, Tirhaka is called king of Cush, or Ethiopia, a "Pharaoh king of Egypt" being spoken of as his cotemporary; that Herodotus speaks of Sethos as king of Egypt when Sennacherib invaded Palestine, and that Sennacherib himself speaks of having for his adversaries "kings of Egypt and the king of Ethiopia." All these proofs that the

invasion of Sennacherib took place while Tirhaka was king of Ethiopia, and before he had become king of Egypt, are disregarded; and to meet the supposed exigency of an Egyptian regnal date, Jewish, Assyrian, and Babylonian chronologies are all recklessly violated.

6. The other occasion in English history which I mentioned as what might give rise to a chronological blunder, is the reign of Charles II. Counting from the death of his father, from which he reckoned his regnal years, to his own death, he reigned thirty-six years; but in reality he began to reign in what he called his fourteenth year, thirteen years having belonged to the Commonwealth. So far as respects chronology, it does not matter whether the interval between the deaths of father and son be counted as thirty-six years of Charles II., or as thirteen years of the Commonwealth and twenty-three of Charles II.; but it would he a serious chronological error, into which however a person would be very likely to fall who had only detached regnal years to guide him, if this interval were counted as thirteen years of the Commonwealth and thirty-six of Charles II. Some instances are certainly to be met with in Egyptian history in which a chronologer would be likely to commit an error analogous to this; but I will not enter on the discussion of them here. I have said, I believe, quite enough to shew that the evidence furnished by the Egyptian monuments is quite insufficient for the construction of a chronological system. It may accredit, or it may shew the worthlessness of, dynastic lists—it may verify, or it may overturn, a chronological system otherwise constructed; but *of itself* it can produce nothing that can be relied on.

7. This being the case, it is evident that if a correct chronology of the Egyptian dynasties can be obtained at all, it must be obtained from the dynastic lists attributed to Manetho; a comparison of which in their present state of corruption may enable us to discover what Manetho really wrote. The problem to be solved is this:—Given the durations assigned to the dynasties and reigns by Africanus and Eusebius, and to the dynasties by the compiler of the Old Chronicle; to recover by legitimate criticism the durations originally assigned to them by Manetho himself; from which all the existing documents have been derived by misconceptions of Manetho's meaning, blundering attempts at correcting his supposed errors, and *subsequently to these*, deliberate falsifications, with a view to bring lists which appeared to be inconsistent with the received Biblical chronology into harmony with it. I believe that I have completely solved this problem. In the present article I give the durations

of the dynasties according to the restored text of Manetho, with such explanations as are necessary to the correct understanding of his chronological system; and I then gave the synchronisms by which the correctness of my restoration is, as I conceive, established. In a subsequent article it is my intention to fill up the outline which I have here drawn, by giving a restoration of the durations assigned to the several reigns by Manetho. In the meantime it is my wish that what I now publish should undergo the most searching criticism.

8. It will be observed that I go no further back than to the commencement of the eighteenth dynasty. Manetho himself, as will be seen, marks this as a point of chronological departure; and the data by which, as I conceive, his text can be confidently restored back to this point, fail as to earlier dynasties. I ought to remark also that I carefully distinguish in my investigation between two things which some enquirers have confounded, namely, the true chronology of the period, and the chronology of it according to the mind of Manetho. I have, in the first instance, sought to discover the latter, using no other data than the three corrupt lists which I have mentioned, and those Greek writings which guided those who prepared them in their corruptions. Thus my restoration of the text of Manetho stands *absolutely independent of Egyptian monumental evidence.* And yet it can scarcely be doubted that Manetho had correct information with respect to the period in question, and that even when he thought it necessary to deviate from historical truth, he adhered strictly to chronological truth. I mean to say that, though he might misrepresent *facts* in a manner analogous to that of an English historian, who, ignoring the Commonwealth, ascribed thirty-six years to Charles II. of England as his reign *de facto,* he always in his summaries of the reigns in the dynasties gave the correct sums; so that the commencements of the several dynasties are all truly given. Hence the synchronisms, by which I shew that the dates according to my system are correctly given, are evidences also of the correctness of my restorations of Manetho's text.

9. The restoration that I have given is, as I have said, wholly independent of Egyptian monumental evidence. I have, however, tested it as well as I could by this last; and I am not aware of a single fact, nor do I believe that any exists, which is established by monumental evidence, and yet inconsistent with my system. This is, however, a matter on which I challenge the most searching criticism. If any such supposed fact be produced, either in the April number of this Journal or in a private letter to myself, and if I cannot shew that the person

who produces it is mistaken in supposing it either to be established by monumental evidence or to be inconsistent with my restored chronology, I will admit that, however plausible my restoration may be, it is unsound. I have no expectation, however, that this will be the case; and I hope that in the July number I shall be able to give, together with a triumphant reply to my assailants, if any, a restoration of the duration of the reigns in the dynasties as originally given by Manetho. I hold this in reserve, until my restoration of the duration of the dynasties be sufficiently tested.

10. Let it be observed, however, that it is to *facts* alone that I will surrender my opinion. *Authority* will have no weight with me. I am perfectly well aware that almost all Egyptologers support a chronological system which is altogether opposed to mine. They think that the accession of Rehoboam to the throne of Judah, and that of Shishonk to the throne of Egypt, which almost immediately preceded it, took place considerably after the time assigned to them in the margins of our tables; and in this Sir Henry Rawlinson and Mr. Bosanquet agree with them. And they refer the exodus to the latter part of the nineteenth dynasty. I maintain, on the contrary, and I think demonstrate, that the accessions of Shishonk and Rehoboam were in 980 and 979 B.C.; and that consequently no curtailment of the reign of any of the kings of Judah is admissible; nor any such arrangement of the Persian reigns as Mr. Bosanquet proposes. I shew also that the Egyptian reign, in which Egyptologers place the exodus, did not commence till about 250 years before the death of Solomon! By *me* the exodus is placed at a far earlier period. This great diversity between my views and those which are generally entertained, renders it a matter of course that quotations from various eminent Egyptologers can be produced *ad libitum*, expressing opinions which, if taken as standards of truth, would prove me to be in error. Such quotations, however, being mere expressions of opinion, have not the slightest weight with me. Unless some monumentally-recorded fact can be produced, which is inconsistent with my chronological arrangement of the dynasties, I shall continue to hold that its inconsistency with the opinions of Egyptologers is no proof whatever that *it* is wrong; the fact being that the inconsistent opinions of Egyptologers are wrong. Again, as respects Sir Henry Rawlinson's canon. This is not a cotemporary document, but a compilation made by an unknown person in the reign of Assur-bani-bal. Its inconsistency with my restoration of Manetho, supported as this is by recorded astronomical observations, proves that the compiler of the canon was a blunderer;

and that the early dates which it is supposed to give are incorrect. Again, as to the Astronomer Royal, while I would cheerfully submit to him our astronomical questions generally, I except the two questions, which are linked together, of the date of the Medo-Lydian war, and the magnitude of the moon's acceleration. I protest against any argument against my restoration which may be drawn from its inconsistency with his notions, that the Medo-Lydian war was terminated by the eclipse of 585 B.C., and that the coefficient of T^2 in the mean elongation of the moon, was $12''{\cdot}192$, as Hansen makes it, or even more. On the contrary, I appeal to the monumentally-recorded eclipse, which I shall bring forward as furnishing *conclusive evidence* that the coefficient of T^2 is much less than this, and consequently that the moon's shadow in the eclipse of 585 B.C. could not have passed where the Astronomer Royal supposes that it did.

11. It is to facts monumentally recorded alone that I will yield; and if any one brings forward facts which he may conceive to be at variance with my views, I have to request that he will quote the precise fact monumentally recorded. There is very great temptation to quote, as a monumentally-recorded fact, what is not really so, but an inference from one; the suppressed premise of the enthymeme being one, of which the person who has drawn the inference has no doubt, but of which others may entertain very great doubts, which, in short, they may regard as positively erroneous. The extent to which this error has been committed by Egyptologers is really surprising. References to the evidence quoted should also be precise.

12. One word more of preliminary matter. The views put forward in this paper are not, so far as I am aware, held by any one but myself. Some of them I expressed so long ago as in March, 1856. See the *Literary Gazette* for that year, p. 111. I advanced further in a paper in *The Journal of Sacred Literature* for October, 1858, p. 126; and still further in a paper in the *Journal of the Royal Asiatic Society* for 1861, vol. xviii., p. 378. In all these papers, while I was in the right direction and gradually approaching the truth, I admitted errors which kept me from attaining to it. My views are now matured. I have succeeded in completely removing the inconsistencies which, though they only introduced errors of small amount, disfigured my former papers. I have produced an arrangement of the dynasties which will, I flatter myself, be found to *run on all fours;* my former one, though much to be preferred to any that had been previously produced, *limping* in more places than one. As respects the medium through which I publish this restoration of Mane-

tho, I think a weekly journal would be objectionable; as in it I could not publish at once the entire of my system, so far as respects the dynasties, with the proofs of its truth. *The Journal of Sacred Literature* seems to be preferable to that of the Royal Asiatic Society, because the subject is closely connected with sacred literature; the chronology of the Israelites in Palestine, and particularly that of their kings, is as much my subject of discussion as that of the Egyptian dynasties; and the views of the early Christians as to Israelitish chronology have to be taken into account as an important means of restoring the corrupt text of Manetho.

13. The mode of proceeding by which I restore the original dynastic durations of Manetho includes a double criticism. These were depraved in the first instance by blundering Egyptian or Greek writers, who looked no farther than Manetho, and whose successive depravations of his numbers were the result of misapprehensions of his meaning in the first instance, and of injudicious attempts at restoring a text which they perceived to be faulty, at a subsequent period. Three texts were thus formed, which I will call A, B, and C, the last of them being the production of a person who had the two former before him, and who sought to reconcile their discrepancies. From these three documents, that attributed to Africanus, that of the Old Chronicle, and that of Eusebius were respectively derived, the process in each case being a process of deliberate falsification of the Egyptian text, grounded on non-Egyptian documents, with a view to establish synchronisms between dates given by A, B, and C, and dates supposed to be given by the non-Egyptian documents. The processes by which the lists of the supposed Africanus, the compiler of the Old Chronicle, and Eusebius, were obtained from the original list of Manetho, have to be reversed in our present proceeding. That is, we have, first, by a criticism in which non-Egyptian documents play a principal part, to recover the documents A, B, and C; and we have, secondly, by a criticism grounded on these three documents alone, to obtain the original text of which they were corruptions.

14. I begin with the first criticism, the object of which is from the three existing lists to recover the three lists A, B, and C; and I begin by remarking that in order that the result of the criticism may be satisfactory, the criticism must proceed on fixed and sound principles. In the first place, we have nothing to do with the question, What is the truth? Chronological truth is, I feel confident, contained in the original list of Manetho, but it is certainly not contained in any of the lists, A, B, and C. Nay, it is very possible that these may deviate from it

even more than the existing lists. Our present object is to distinguish non-Egyptian corruptions from what is Egyptian; whether the latter be the truth of Manetho, or the blunders of his followers. To distinguish what is Egyptian from what is non-Egyptian, I lay down the following canons:—

I. If a number occurs in two of the existing lists, it is Egyptian; the number in the third list may, or may not, be Egyptian. The three existing lists are independent of one another, having been corrupted by persons who sought to establish by their corruptions different synchronisms. It is, therefore, not to be supposed that two of them should have obtained the same numbers by their corruptions.

II. If a marginal note be appended to one of the lists, say A, which is inconsistent with that list, the marginal note is Egyptian, and probably Manetho's own, and the inconsistency arises from one or more non-Egyptian corruptions.

III. Where any of the lists contains or implies a synchronism with a non-Egyptian date, this synchronism has been produced by a corruption; the interval between the Egyptian date in the original list and the date which the compiler of the existing list believed to be the proper one having been added to, or subtracted from, some one of the Egyptian numbers, or having been divided into parts, which were added to, or subtracted from, some two or more of the Epyptian numbers.

It will be seen that each of the three existing lists contains a synchronism, produced by corruption, and that the three synchronisms are all different.

IV. Where a number that has to be added or subtracted in order to produce a synchronism is divided, it may be assumed that the division is so made as that all the changes but one are of the easiest and most obvious kind; that is to say, additions or subtractions of multiples of ten, or omissions of the units in a number, so as to reduce it to a multiple of ten.

V. Where a number is taken away from the duration of one dynasty and added to that of another, in order to correct a supposed non-Egyptian anachronism, the number so dealt with is probably a round number, that is, a multiple of ten.

I lay down these canons in order that it may be seen that my mode of proceeding is not an arbitrary one, and that the result at which I arrive is the only one that can be legitimately attained.

15. I will now consider what the synchronisms were which guided the persons who introduced into the lists non-Egyptian corruptions. Two of these are derived from the exodus of the Israelites; and it is therefore necessary to consider at what date

the early Christians placed this. St. Clement of Alexandria says expressly that the exodus took place 345 years before the renewal of the canicular cycle, which we know was in 1322 B.C. The date intended is therefore 1667 B.C.; a date which appears to have been that of all the early Christians, with the exception of Julius Africanus, who threw the exodus back 130 years. In the dynastic lists attributed to Africanus we find the accession of the eighteenth dynasty placed in 1667 B.C., a marginal note being added stating that this was also the date of the departure of the Israelites under Moses. From this Bunsen inferred that, when Clement placed the exodus in 1667 B.C., he meant that this was the date of the accession of the eighteenth dynasty, with which he erroneously supposed that the exodus synchronized. I have not a copy of the *Stromates* within reach, but I believe that there is no proof that he believed the exodus to synchronize with the accession of the eighteenth dynasty. This, however, is immaterial; others certainly thought so. But what appears to me quite certain is that 1667 B.C. is given by him as the date of the exodus itself, and that it was obtained from the Bible, without any reference to Egyptian chronology. Instead of its being borrowed from Manetho, as Bunsen imagined, the list which bears the name of Africanus has suffered corruption, in order that it might be brought into harmony with the Biblical date of the exodus, which was assumed to be that of the accession of the eighteenth dynasty.

16. In order that it may be clearly seen that this date of 1667 B.C. is a Biblical one, and that the authority on which it rests may be made manifest, I will give the chronology of the two books of Kings, according to the early Christians, and according to the margin of the English Bible, in parallel columns; the difference between the two dates being given in a third column; and whenever this difference changes, I will explain the grounds of the change.

The Exodus	.....	1667	B.C.	1491	B.C.	176	
Building of the Temple	....	1027	„	1012	„	15	*(a)*
Accession of Rehoboam	....	990	„	975	„	15	
„ Abijam	.....	973	„	958	„	15	
„ Asa	.....	970	„	955	„	15	
„ Jehoshaphat	..	929	„	914	„	15	
„ Jehoram	....	904	„	892	„	12	*(b)*
„ Ahaziah	....	896	„	885	„	11	*(c)*
„ Athaliah	....	895	„	884	„	11	
„ Jehoash	....	889	„	878	„	11	
„ Amaziah	....	849	„	839	„	10	*(d)*
„ Uzziah	.....	820	„	810	„	10	
„ Jotham	.....	768	„	758	„	10	
„ Ahaz	.....	752	„	742	„	10	
„ Hezekiah	....	736	„	726	„	10	

Accession of Manasseh	707 B.C.	698 B.C.	9 *(d)*
„ Amon	652 „	643 „	9
„ Josiah	650 „	641 „	9
„ Jehoiakim....	619 „	610 „	9
„ Zedekiah	608 „	599 „	9 *(e)*

17 *(a)*. The difference between the two dates is here diminished by 161 years, of which the main part 160 is due to the circumstance that in 1 Kings vi. 1 the early Christians read in their Bibles "six hundred and fortieth," where our Bibles, following the present Hebrew text, read "four hundred and eightieth." In the text of the LXX., as now received, we have "four hundred and fortieth,"—a corrupt reading made out of the true reading of the LXX. and the translation of the Hebrew text which Origen made for his *Hexapla*. The additional year of difference arose from the early Christians having counted 640 complete years, whereas the English Bible counts 480 current years, or 479 complete years.

18 *(b)*. It is distinctly stated in 1 Kings xxii. 42, that Jehoshaphat reigned twenty-five years. In the margin of the English Bible this is reduced to twenty-two, on the strength of certain synchronisms between the reigns of the kings of Judah and Israel, which, according to the present Hebrew text, are inconsistent with his having reigned twenty-five years. The passages which give these synchronisms were translated into Greek by Origen for his *Hexapla*, and from that, as in many other instances, they have found their way into our present copies of the LXX. The original reading of the LXX. is, however, given also in these copies, and it fully supports the larger number of years assigned to Jehoshaphat in the passage already cited. After 1 Kings xvi. 28, the LXX., as uncorrupted, proceeds: "And in the eleventh year of Omri Jehoshaphat the son of Asa began to reign." Then follows the passage which in our present Bibles stands as 1 Kings xxii. 42—50, substituting, however, in verse 49 "the king of Israel" for "Ahaziah, the son of Ahab." After relating the succession of Jehoram, the LXX. proceeds as in 1 Kings xvii. 29, etc.; but in the beginning of verse 29 it reads, "And in the second year of Jehoshaphat king of Judah began Ahab," etc.

19 *(c)*. It is stated in both the Hebrew text and the LXX. that Jehoram reigned eight years. In the margin of the English Bible, however, only seven are assigned to him. The suppression of a year is, no doubt, due to the synchronisms which, as they now stand in the Hebrew, cannot be reconciled with one another without great difficulty, and without arbitrary assumptions of kings reigning in consort, and reigns being counted from different

epochs. I observe that the latter part of 2 Kings i. 17 is omitted in the LXX. It appears to be spurious. The Hebrew text in 2 Kings viii. 16 does not admit the translation given in the English Bible, which however is scarcely capable of a consistent interpretation. The only admissible translation would be, "And in the fifth year of Joram, the son of Ahab, king of Israel, and of Jehoshaphat king of Judah;" which is manifestly self-contradictory. Our present copies of the LXX. furnish us with no help. They contain a version of the Hebrew text, probably that of Origen taken from the *Hexapla*. The genuine reading of the LXX. is not given *also*, as it is in the First Book of Kings. Under these circumstances the only safe course is to have regard to the lengths of the reigns which are given, neglecting the corrupted synchronisms; and here we meet with no difficulty, for the two sets of numbers correspond. In the Biblical chronology of the kings of Judah, I take it that we have a chronological canon of the same nature as that of Ptolemy; as many years being assigned to each king as there were new moons of Nisan in his reign. On the contrary, a reign of a king of Israel was reckoned to include all the years in any part of which he was king. His first year was the civil—or, as some call it, the ecclesiastical year (beginning with the new moon of Nisan)—in which he came to the throne; while the accession of a king of Judah might be described, in reference to the reign of a king of Israel, either as the year corresponding to his first year, or as the year next before this. The following table will shew how the two sets of numbers of years assigned to the kings of Judah and Israel correspond. I prefix years B.C. at the new moon next after the vernal equinox of which the regnal years of the kings of Judah commenced. For the present these years B.C. may be regarded as arbitrary, and only approximate; but I will shew in the course of this paper that they are the true years, as fixed by astronomical observations. I begin with the accession of Omri in the thirty-first year of Asa, after the termination of the civil war. See 1 Kings xvi. 23.

B.C. 929	Thirty-first Asa	First Omri
,, 919	Forty-first Asa	Eleventh Omri
,, 918	First Jehoshaphat	Twelfth Omri and first Ahab
,, 917	Second Jehoshaphat	Second Ahab
,, 897	Twenty-second Jehoshaphat	Twenty-second Ahab and first Ahaziah
,, 896	Twenty-third Jehoshaphat	Second Ahaziah and first Joram
,, 894	Twenty-fifth Jehoshaphat	Third Joram
,, 893	First Jehoram	Fourth Joram
,, 886	Eighth Jehoram	Eleventh Joram
,, 885	First Ahaziah	Twelfth Joram

20 *(d)*. The reigns of Jehoash and Hezekiah are expressly

stated to have lasted forty and twenty-nine years respectively; but in the margin of the English Bible a year is struck off from each of them.

(e). The early Christian placed the accession of Zedekiah and the captivity of Jeconiah, which was in the same year, seventy years before the capture of Babylon by Cyrus, which all agree to have been in 538 B.C. They assumed this to be the true interval, believing that the prophecy of the seventy weeks' captivity referred to these limits. Archbishop Ussher transferred the earlier limit from the captivity of Jeconiah to an earlier captivity in the first year of Nebuchadnezzar. He assumed that this was 606 B.C., and that the year of Necho's expedition, in which Josiah was killed, was 610 B.C. In reality, however, this last event took place in 608 B.C.; the earliest date of which Egyptian chronology admits, as I will shew when I come to consider the separate reigns; and the canon of Ptolemy fixes the accession of Nebuchadnezzar in 604 B.C. Archbishop Ussher thought that the canon gave the date of his father's death, and that he reigned two years in conjunction with him previous to 604 B.C. This, however, is an inadmissible hypothesis. Nebuchadnezzar's years must have been counted from the year when he became king. They were certainly counted from 604 B.C, and therefore he became king then. If he became king two years before his father's death, his father must have lived till 602 B.C. I believe that his father was the Labynetus of Herodotus, and that he was the king who intervened at the termination of the Lydian war in 603 B.C. The death of Josiah, and capture of Jerusalem by Necho, in 608 B.C., and the first captivity, at the beginning of the reign of Nebuchadnezzar in 604 B.C., appear to me to be fully-established chronological facts, as to which no rational controversy can exist. We may date the seventy years' captivity from the former, and make it to terminate at the capture of Babylon; or we may date it from the latter, and make it to terminate at the death of Darius the Mede, placing this last in 534 B.C. I am not aware of there being any authority for preferring the received date of 536 B.C. to this. The question of the seventy years' captivity belongs to the department of theology rather than to that of chronology; and its discussion does not lie within the compass of the present paper.

21. I have now shewn that the date of 1667, assigned to the exodus by St. Clement of Alexandria, and believed to be the true date by the early Christians generally, was a purely Biblical date, obtained by calculation from Biblical numbers, historical or prophetical. It appears to have been accepted by all the

early Christians, with the exception of Julius Africanus, who threw the exodus back 130 years. He is blamed for having done this by Georgius Syncellus, who frequently complains of his chronological blunders. It appears that while he adhered to the apostolical tradition, that the incarnation of Christ was exactly 5500 years after the creation, he omitted the generation of the second or post-diluvian Cainan, which is given in the LXX. as 130 years, and that he compensated for this omission by adding 110 years to the interval between the exodus and the foundation of the temple, and twenty more to the interval between that and the first year of Darius. The Syncellus is not very clear in his statements as to where this error was committed. It seems clear, however, that he placed the captivity of Jeconiah in 631 B.C., seventy years before the accession of Cyrus to the throne of Persia. Here then he added twenty-three years to the received chronology. *Somewhere,* therefore, between the building of the temple and the captivity of Jeconiah he must have dropped three years. It is a matter of no importance, however, where this loss was, or how it was occasioned.

22. Having now shewn what was the date of the exodus according to the early Christians generally, and what it was according to the peculiar views of Julius Africanus, I proceed to speak of the synchronisms believed to exist between the exodus and events in Egyptian history. Two opinions seem to have divided the early Christians, each of which has been brought to bear on one of the existing lists. Africanus imagined, as Josephus had done before him, and probably other Jews, who thought that it was creditable to their nation, that the Hyk-shôs were the Israelites, that their expulsion was an Egyptian mode of describing the exodus, and that, consequently, the accession of the eighteenth dynasty, which synchronized with the expulsion of the Hyk-shôs, ought to be referred to the Biblical date of the exodus. The other opinion, which was probably held by a much greater number of the early Christians, and which was subsequently adopted by the Syncellus, harmonized much better with the Biblical narrative. According to it, the exodus did not take place at the commencement of the eighteenth dynasty, but eighty years or upwards after it. The Israelites came into Egypt in the time of the shepherds. One of these was the Pharaoh that advanced Joseph; Ahmôs of the eighteenth dynasty, who expelled them, was the new king who knew not Joseph, and who commanded that the Hebrew infants should not be suffered to live. Aaron was born before this edict, and of course before Ahmôs came to the throne; and Moses, it is supposed, was born very shortly after his accession. The

exodus, it is said, took place when Moses was eighty years old. All, therefore, that was necessary in order to determine the exact interval was, as was supposed, to find the least interval, consisting of a complete number of reigns, extending from Ahmôs downwards, and exceeding eighty years. Now Josephus gives the reigns from Ahmôs down with very great apparent accuracy, not only the years but the months being stated; and it cannot reasonably be doubted that the list which Josephus gives was Egyptian, if not Manetho's own. According to this list, the first four reigns consisted of $25y.\ 4m.+13y.+20y.\ 7m.+21y.\ 9m.=80y.\ 8m.$, or 81 years. Hence, the early Christians placed the accession of the eighteenth dynasty eighty-one years before the Biblical date of the exodus, or in 1748 B.C.

23. Plausible as this hypothesis is in some respects, there is probably no Egyptologer of the present day that could accept it. To say nothing of the monumental evidence connected with the early kings of the eighteenth dynasty (which, however, present very great difficulties), there are two parts of this hypothetic scheme which are plainly repugnant to the Biblical narrative. In the time of Joseph every shepherd was an abomination to the Egyptians: this could not have been the case when the Hyk-shôs kings were on the throne. And again, the fourth reign of those which make up the eighty-one years is that of a queen, whereas the Biblical narrative states expressly that the exodus was at the end of the reign of a king. The Biblical narrative would obviously be better satisfied by supposing the persecutors of the Israelites to be of the Hyk-shôs dynasty, and the patron of Joseph to be of the Egyptian dynasty which preceded them; when the Shôsu, or shepherds, were known as troublesome neighbours, but were not yet known as conquerors and oppressors of Egypt. Neither of the two modes of making the exodus to synchronize with events in Egyptian history which were current among the early Christians was a proper mode. It is fortunate, however, that both were in use, and that the existing lists were falsified, one of them in order to produce one synchronism, and another to produce the other; as this circumstance is a great assistance in restoring the genuine reading.

24. But, whatever be the defects of the two hypothetic schemes which I have mentioned, I cannot help saying that either of them is, in my judgment, far less objectionable than the modern scheme which has been devised as a mode of reconciling them. The inventor of it,—I will not mention his name, because I am not sure of it, and I have not the works within reach which would enable me to ascertain it, and also because I suspect it to be one to whom Egyptology is under very great

obligations,—the inventor of it, whoever he was, set out with supposing that, instead of the two hypotheses starting from the one date of the exodus, 1667 B.C., and placing the accession of Ahmôs, one of them in that year, and the other eighty-one years before it, they started from the accession of Ahmôs, and supposed two—not exoduses, but—expulsions of the Hyk-shôs, one of them at that time, and the other, eighty-one years after, at the beginning of the fifth reign in the dynasty. Ahmôs, according to this hypothesis, drove the Hyk-shôs out of the rest of Egypt, and shut them up in Avaris, and Thothmôs, the fifth king of the dynasty, drove them out of Avaris. One writer after another has repeated this statement, as if it were an unquestionable truth, although the only ancient authority adduced in support of it was manifestly misunderstood. To me, who never accepted this hypothesis, and to whom it was always a puzzle how any one else could believe it, the pertinacity with which it has been adhered to appears most unaccountable. Bunsen in his latest work, the fourth volume of his *Egypt's Place in Universal History*, and Lepsius in his *Königsbuch*, treat the existence of this interval between the partial and the complete expulsion of the shepherds as a settled point. Lepsius makes a seventeenth dynasty of it, to which he assigns ninety-three years. Now this appears to me absolutely inconsistent with the well-established fact that Thothmôs I., the third king of this dynasty, carried his arms into Mesopotamia. I cannot conceive it possible that he could have done this, if there were within the frontiers of Egypt, in the direction to which he had to march, a large fortified city in the hands of his enemies. And more than this, as De Rougé has long since pointed out, Ahmôs, the son of Abna, is made to say on his funeral stèle that in the sixth year of king Ahmôs he took part in the capture of Avaris; after which he says that the king passed along the Nile, the whole length of Egypt from the north to the south *(Stèle Egyptienne*, p. 119). The idea of the shepherds having remained in Egypt till the reign of Thothmôs III. is, in one word, a pure fiction of modern Egyptologers, for which there is no foundation either in the writings of the extractors from Manetho, or in the hieroglyphic records.

25. Having thus cleared the way, I will proceed to consider the three lists as handed down to us by Georgius Syncellus, confining myself to the portions which begin with the eighteenth dynasty and end with the twenty-sixth. I here give the duration of each dynasty according to the three authorities, and the interval from the accession of Ahmôs to the beginning of each dynasty after the eighteenth.

	Africanus.		Old Chronicle.		Eusebius.	
Eighteenth dynasty	263	263	348	348	348	348
Nineteenth „	209	472	194	542	194	542
Twentieth „	135	607	228	770	178	720
Twenty-first „	130	737	121	891	130	850
Twenty-second „	120	857	48	939	49	899
Twenty-third „	89	946	19	958	44	943
Twenty-fourth „	6	952	44	1002	44	987
Twenty-fifth „	40	992	44	1046	44	1031
Twenty-sixth „	150	1142	177	1223	167	1198

It will be observed that the interval between the expulsion of the Hyk-shôs and the conquest of Egypt is exactly eighty-one years more according to the Old Chronicle than according to Africanus, the latter going back to the exodus, and the Old Chronicle to a period eighty-one years before it. Take 1142 for 1667 B.C., or 1223 from 1748 B.C., and there remains 525 B.C. for the date of the conquest of Egypt.

26. Before going further, it is necessary to consider the summation at the end of the twenty-fourth dynasty which is given by the Syncellus in the list which he ascribes to Africanus. No one, I believe, pointed out the meaning of this number until I did so in my paper of 1861, already cited. I observed that if we substituted 44 for 6 as the duration of the twenty-fourth dynasty, which number 44 is found both in Eusebius and in the Old Chronicle, we should have 990 in place of 952 for the sum of the dynasties beginning with the eighteenth and ending with the twenty-fourth. This number left standing alone, and with nothing to explain it in the list where it stood, is therefore Egyptian, and I doubt not Manetho's own (can. ii. of § 14). It follows from this that the number 6 in Africanus's list was 44 in A; that one of the numbers in the list of the Old Chronicle is too great by twelve, and one of those in that of Eusebius is too small by three.

27. I have hitherto said nothing as to the synchronism, to effect which the list of Eusebius was corrupted from C. It did not depend on the exodus. Eusebius places this at the end of one of the reigns in the latter part of the eighteenth dynasty, and does not seem to have connected any other Egyptian event with it. He placed it honestly where, according to his Biblical views, it ought to be placed, making no alteration in Egyptian chronology with a view to establish a synchronism. If we look, however, to the end of the nineteenth dynasty, we shall see his synchronism. He says that Troy was taken in the last year of this dynasty. Take 542 from 1198, and there remains 656, the interval, according to Eusebius, between the fall of Troy and 525 B.C., the conquest of Egypt. Eusebius's date of the taking of Troy is 1181 B.C., *three* years later than that of Eratosthenes;

and it cannot be doubted that Eusebius struck off the three years mentioned in the last section, in order to reduce the received date, with which C was in harmony, to his own. Let us now consider from which dynasty he struck off these years. Certainly not from the eighteenth, nineteenth, nor twenty-fourth, in which his numbers are the same as those in the Old Chronicle; nor yet from the twenty-first, where he agrees with Africanus. There remain the twentieth, twenty-second, and twenty-third; but if we look to the twenty-second, as it stands in Africanus's list, we shall see that the forty-nine years assigned to this dynasty by Eusebius are Egyptian. Africanus divides the dynasty thus:

α′	Σεσώγχις	ἔτη	ΚΑ′
β′	Ὀσορθὼν	ἔτη	ΙΕ′
γ′ δ′ ε′	Ἄλλοι τρεῖς	ἔτη	ΚΕ′
ϛ′	Τακέλωθις	ἔτη	ΙΓ′
ζ′ η′ θ′	Ἄλλοι τρεῖς	ἔτη	ΜΒ′

It is evident that, when the compiler of C thought it necessary to diminish the length of this dynasty, he felt himself obliged to stop at forty-nine, the sum of the three single reigns which are given; viz., 21 + 15 + 13. We may be sure, therefore, that these three numbers are Egyptian. We cannot substitute fifty-two for forty-nine in C; nor yet can we admit any such correction as *ΚΔ′* for *ΚΑ′* or *ΙΘ′* for *ΙΕ′*, which have been proposed. If a correction of any number be required to make the sum accurate, we must read *ΚΘ′* for *ΚΕ′*. But it is an unsafe assumption that changes of the text were accidental, having been occasioned by similarity of letters; in the great majority of instances they were deliberately made, with a view to improve the text which the writer knew that he had before him.

28. It appears from what has been said that the three years struck off from C by Eusebius, were struck off either from the twentieth or from the twenty-third dynasty. We must suppose either that C had 181 for the length of the twentieth, or that it had 47 for that of the twenty-third. It will occur to most persons that the latter supposition is the more probable of the two, as it alters one of the three forty-fours which appear in the list of Eusebius as the number of years in these successive dynasties. It seems, at first, very improbable that this should be the case; and yet, if Eusebius obtained the number 44 accidentally by taking three from 47, neither of which last numbers was chosen in order to produce the 44, it does not appear to me that the improbability of the concurrence of three forty-fours is such as to have much weight. It appears to me a much stronger argument in favour of making this change rather

than the other, that 228, the length of the twentieth dynasty in the Old Chronicle, is probably a corruption of 178, the length according to Eusebius; and that the corruption having been made to avoid an anachronism, a displacement of the round number fifty years is vastly more probable than one of forty-seven. At any rate, as the two arguments tend to the same conclusion, I think we may safely infer that the change was made in the twenty-third dynasty, where C had 47 for the 44 of Eusebius. It will corroborate this conclusion if we find that to read 178 in the Old Chronicle as the length of the twentieth dynasty would produce an anachronism, according to a natural mode of connecting the reign of Rehoboam with Egyptian history, and that the substitution of 228 for it would remove the anachronism. Before, however, I consider the numbers in the Old Chronicle, I have something more to say of Eusebius.

29. It is not to be supposed possible that so laborious a chronologist as he was, and who had made so many changes as we know he did in the chronology previously received, as respected both sacred and profane history, should have made no change in the list of the Egyptian dynasties, other than to substitute 44 for 47 as the length of one of them. I by no means affirm this. I say that this was the only difference between the list given by the Syncellus as that of Eusebius, and the list that I call C,—the only change made by Eusebius from a non-Egyptian source; but I believe that the list C was constructed by Eusebius himself out of the two Egyptian documents A and B, which he had before him: and it will be found very useful in settling points that might otherwise be dubious in these two lists. We may assume that there is nothing in C which is not derived from A or B; and as a first-fruit of this principle we may conclude that 167, the duration of the twenty-sixth dynasty in C, must have been that of B also; for it is impossible that it could come from A. The person who diminished the durations of the later dynasties in order to bring down the exodus to 1667 B.C., and who struck off 38 years from the twenty-fourth, and manifestly 4 from the twenty-fifth (rejecting the units in the 44 found in the other two lists), must have rejected a unit in the twenty-sixth also. The duration must have been $150+X$, X being less than ten, and could not therefore have produced 167.

30. The framer of the list in the Old Chronicle then added 22 years to the duration of the dynasties in B, in order to raise the accession of the eighteenth dynasty to 1748 B.C., *i.e.*, 81 years before the exodus; and he effected this by adding 10 years to the twenty-sixth, and 12 to some of those before the twenty-fourth. The duration of the twenty-fourth and twenty-fifth

were 44 in all the Egyptian copies, as well as in the Old Chronicle and Eusebius. Now why did he divide these 22 years and add them in two places? Evidently to throw the accession of the twenty-fourth, or Ethiopian dynasty, sufficiently far back to maintain the proper Biblical synchronism. Hezekiah began to reign, according to the early Christians, in 736 B.C. (§ 16), and the first Ethiopian king had his aid sought by Hoshea before this. Now, according to B, the twenty-sixth dynasty began, as we have just seen, 167 years before Cambyses, that is, before 525 B.C. (§ 25), or in 692 B.C. The Ethiopian dynasty began 44 years earlier, or in 736 B.C., which as we have just seen is too late. Accordingly the compiler of the chronicle added ten years to the twenty-sixth dynasty, throwing back the accession of the twenty-fourth to 746 B.C., which produces the required synchronism.

31. We see from this that the compiler of the Old Chronicle did not look to the Exodus alone, as what required a synchronism in Egyptian chronology. He made a change in order to make the period of the Ethiopian dynasty synchronize with the reigns of Hoshea and Hezekiah; and this being the case we cannot doubt but that he would make the close of the reign of Solomon and the fourth year of Rehoboam to stand in what he would consider their proper place in Egyptian chronology. We now know perfectly well that the Shishak who then reigned in Egypt was the first king of the twenty-second dynasty; but to the compiler of the Old Chronicle such a supposition could not occur. According to the Old Chronicle the twenty-second and twenty-third dynasties together only lasted 67 years, and there is a doubt whether the twelve years which the compiler of the Chronicle added were not added to one of these dynasties. On the most favourable supposition, the twenty-second dynasty, which began according to the Old Chronicle in 847 B.C., would not begin before 837 B.C. in B; and it very probably would not begin till 825 B.C. The fifth year of Rehoboam fell according to the early Christians in 986 B.C.: so that the synchronism now known to be the proper one was one that he could not conceive possible. His idea evidently was that the year 994 must fall within the twentieth dynasty, where the kings were not named, and not in the twenty-first, where all the kings were named, and where it was clear that none could be identified with Shishak. Let us suppose that the twentieth dynasty lasted according to B 178 years; the eighteenth beginning in 1726 B.C., the nineteenth in 1378 B.C., and the twentieth in 1184 B.C.; the twenty-first would begin according to B in 1006 B.C., and according to the Old Chronicle in 1028 B.C. This is 42 years before the fifth year of

Rehoboam, which, according to the notions of the compiler of the Chronicle, was the limit which the twentieth dynasty must include. Therefore, he added 50 years to the twentieth dynasty, and subtracted the same number from one of the subsequent ones.

32. It is still uncertain what were the durations of the twenty-first, twenty-second, and twenty-third dynasties, according to B; but we now know that the sum of the three was not $121+48+19=188$ as in the Old Chronicle, but $188+50-12=226$. We have

	B		C	
Eighteenth	348	348	348	348
Nineteenth	194	542	194	542
Twentieth	178	720	178	720
Twenty-first	(121?	?	130	850
Twenty-second	48?	?	49	899
Twenty-third	19?)	946	47	946
Twenty-fourth	44	990	44	990
Twenty-fifth	44	1034	44	1034
Twenty-sixth	167	1201	167	1201

The lists B and C only differ in the duration which they assign to the twenty-first, twenty-second, and twenty-third dynasties; and it is evident that as to these they do differ materially. No addition of 50 years to a dynasty of the Old Chronicle and subtraction of twelve from the same or another can bring them into harmony. Here then the list C must have been taken from A; and I will now proceed to recover as far as possible this last list, which may again, when recovered, assist us in recovering the deficient numbers in B.

33. The list given in § 25 as that of Africanus cannot be really his; for the list, as given by the Syncelius, contains a statement that the exodus took place at the beginning of the eighteenth dynasty; and we know that Africanus placed the exodus 130 years earlier than the accession of the eighteenth dynasty is here placed. When we recollect, however, that Josephus, who agrees with Africanus in respect to the synchronism of the exodus, says expressly and repeatedly that the eighteenth dynasty lasted 393 years, I think we cannot reasonably doubt that 263 was substituted for 393, which Africanus had in his list, by some corrector of Africanus, who disapproved of his lengthened chronology. It is certain, however, that the early Christians placed the exodus in 1667 B.C., and that this was, consequently, the date of the accession of the eighteenth dynasty, after they had cut down the three last dynasties from $44+44+150+X$ to $6+40+150$. Somewhere, therefore, after the eighteenth dynasty Africanus must have added 130 years; and let us now consider where.

34. In the first place, there can be no doubt that the duration of the nineteenth dynasty, which is divided into the several reigns, has been enormously magnified by Africanus. He makes the reigns of four kings, in four successive generations from father to son, to reign 191, or rather, if we correct a clerical error, 196 years, which is out of all bounds of probability. Here then Africanus has added something considerable. Sixty years, which would leave 136 years for the four reigns, cannot be thought too much to take from the 209, which he joins to the dynasty; and that this was the true number that he added is rendered almost certain from the comparison of 393+149 with 348+194. Each sum is 542. It is very possible that the eighteenth dynasty was divided by Manetho into two portions, the latter of which lasted 45 years; and that while some of Manetho's followers, including the author of A, connected this period with the eighteenth dynasty, others, as the author of B, connected it with the nineteenth. We shall see hereafter that there is direct evidence that such a division of the eighteenth dynasty was made, and that the latter portion of it lasted 45 years.

35. There remain seventy years, which Africanus must have added to some dynasty between the nineteenth and the twenty-fourth. This could not be the twenty-first, because Eusebius, whose authorities were A and B, agrees with Africanus as to the duration of this being 130 years. It must, therefore, be either the twentieth, the twenty-second, or the twenty-third. In favour of the first supposition there are two probabilities. Africanus would be likely to make his additions to two adjacent dynasties; and the addition was more likely to have been made in the twentieth dynasty, where the reigns are not divided, than in either of the others, where the reigns are divided, and are already below the average, and in one of the dynasties greatly below it. It may occur to a person that by taking 70 years from 89, the length of the twenty-third dynasty in Africanus, we get 19, its length according to the Old Chronicle; but this number 19 is a very doubtful one, being one of three among which there exists two errors (§ 32). And the division of Africanus's duration of the entire dynasty 89 into the four separate reigns 40+8+10+31 (ΔΑ for ΔΔ) seems to me to have strong internal evidence of its genuineness. But what seems to me to settle the question is this. Suppose that 65 was the reading of the early Christians and of A in this place, it accounts for the numbers in C. Eusebius in compiling this list had before him A and B. The four dynasties as to which there is now a doubt would, on the last supposition, stand thus in A, B, and C; all of which agree as to their entire duration being 404.

	A	B	C
Twentieth	65	178	178
Twenty-first	130		130
Twenty-second	120	226	49
Twenty-third.....	89		47

Eusebius seems to have preferred B's duration of the twentieth dynasty, and to have taken A's durations as the more likely to be correct for the three following ones. He retained A's number for the twenty-first dynasty, and he had then to subtract from the two following the 113 which he had added to A's duration of the twentieth. He took from the twenty-second so many as reduced the entire duration according to A to 49, the number in the three reigns expressed separately (see § 27); that is, he took 71 from this dynasty, and the remaining 42 he took from the twenty-third, reducing its duration from 89 to 47.

36. I now proceed to compare the lists A and B. Both of these are imperfect; the duration of the twenty-sixth dynasty being wanting in the former, so far as respects the units, by which it exceeded 150, and the durations of the twenty-first, twenty-second, and twenty-third being uncertain in the latter. We only know that they were the three numbers, 121, 48, and 19, one of them increased by 50, and one of them diminished by 12, the third being unaltered; or possibly, though not probably, one of them being increased by 38, and the other two unaltered. I will now assume what cannot be considered absolutely certain, but what has a great deal of plausibility about it. It is not the only hypothesis that is admissible; but I find that it gives the duration of the eighteenth dynasty according to Manetho, when all corruptions have been weeded away, such as can be divided into separate reigns in a more satisfactory manner than the other hypothesis does. It will be observed that, according to B, the accession of the twentieth dynasty synchronizes with the fall of Troy, according to Eratosthenes. According to A, it was at least eight years later; for 159 is the greatest length that we can assign to the twenty-sixth dynasty. I assume that it was nine years later; that the number 121 is according to B the duration of the twenty-first dynasty, and that it was increased in A to 130, with a view to throw back the accession of the twentieth dynasty to 1184 B.C. The two lists A and B would then stand as follows, as proved, and on the hypothesis just assumed.

	A (as proved)		(as assumed)	B (as proved)		(as assumed)	
Eighteenth	393	393		348	348	348	348
Nineteenth	149	542		194	542	194	542
Twentieth	65	607		178	720	178	720

	A (as proved)		(as assumed)		B (as proved)		(as assumed)	
Twenty-first	130	737					121	841
Twenty-second	120	857			226		105	
Twenty-third	89	946				946		946
Twenty-fourth	44	990			44	990	44	990
Twenty-fifth	44	1034			44	1034	44	1034
Twenty-sixth	150+X	1184+X	158	1192	167	1201	167	1201

37. Now, assuming what I have here assumed, it is easy to trace back these lists to two earlier lists, which may be called D and E. The latter will be obtained by merely reducing the duration of the twenty-sixth dynasty from 167 to 158. The former will be obtained by substituting 74+121 for 65+130, as the duration of the twentieth and twenty-first combined. A corruptor first added nine years to the 121, in order to bring the accession of the twentieth dynasty to 1184 B.C.; and then, observing that the sum of the seven dynasties had become 999 in place of 990, some other corruptor struck the nine years in excess from the twentieth dynasty. We have thus

	D			E		
Eighteenth	393	393	1717	348	348	1717
Nineteenth	149	542	1324	194	542	1349
Twentieth	74	616	1175	178	720	1175
Twenty-first	121	737	1101	121	841	997
Twenty-second	120	857	980	48?	?	876
Twenty-third	89	946	860	19?	946	?
Twenty-fourth	44	990	771	44	990	771
Twenty-fifth	44	1034	727	44	1034	727
Twenty-sixth	158	1192	683	158	1192	683

I add a third column under each letter giving the year B.C. when the dynasty began.

38. There is still a material difference between the two lists; but it will be possible to produce an earlier list F from which both these lists were derived, and a still earlier one, Manetho's own, of which this is a corruption. The lists D and E differ, it will be perceived, only as to three dynasties, the twentieth, twenty-second, and twenty-third; and the differences are of such a nature as can only be explained by supposing that two of these dynasties overlapped the following ones, so as to have two durations;—that each list gives the longer duration of one of the dynasties, that is, the time from its commencement to its extinction, and the shorter duration of the other, that is, the time from its commencement to the commencement of the following one;—and that the third of the dynasties, manifestly the twenty-second, was shortened by the difference between the longer and the shorter duration of that dynasty of which the full length was given. To give the correct chronology the shorter duration ought to have been given in both instances, and it is

so in F; but the framers of D and E each gave one dynasty its full length, and to maintain the total 990, they had to shorten the twenty-second dynasty.

The two durations of the twentieth dynasty are both given, 74 and 178; where, therefore, 178 is allowed for the twentieth, as in E, the twenty-second is diminished by 104. Let the shorter duration of the twenty-third be called Y, the longer is 89; and in D, where we have 89, the twenty-second dynasty is shortened by 82−Y; its length is 209−Y. Of course its length in E is 105−Y; and the list F must have been as follows:—

Eighteenth	348	348	1717
Additional	45	393	1369
Nineteenth	149	542	1324
Twentieth	74+104	616	1175
Twenty-first	121	737	1101
Twenty-second ..	209—Y	946—Y	980
Twenty-third	Y+(89—Y)	946	771+Y
Twenty-fourth ..	44	990	771
Twenty-fifth	44	1034	727
Twenty-sixth	158	1192	683

39. The second column in this table gives the interval from Ahmôs to the accession of the following dynasty, according to the view of the composer of the list F; but if we wished to have the sum of the durations of all the dynasties, we must add to the total in this list 104+89−Y=193−Y; and the mistake of the composer of this list F, which affected all the other lists that we have been considering, was that he supposed 990 to be the interval between the accession of the eighteenth and the twenty-third dynasty, when it was really the sum of the duration of the seven dynasties. Manetho's duration of the eighteenth dynasty was 193−Y years less than 348 or 155+Y. His durations of all the subsequent ones were the same. In order then to have the list as originally constructed by Manetho, we have only to determine Y the length of the twenty-third dynasty in E. The twenty-second and twenty-third dynasties are in the Old Chronicle made to have lasted 48 and 19 years; and we have seen that 50 years were deducted and 12 years added, so that the sum of the two was 105. It is far more likely that the two changes mentioned were made in different dynasties, than that a single deduction of 38 was made from one of them. In this more probable case, Y would be 69 or 7; on the less probable supposition it might be 19 or 57, but no other value is admissible. Now, the twenty-third dynasty began by the table 771+Y B.C., and it lasted 89 years, or to 682+Y B.C. The last king of the dynasty was, according to Manetho, Zet, who is evidently the Sethos of Herodotus, who reigned at and after the time of Sennacherib's disastrous invasion. Now, it is quite certain from

the Assyrian inscriptions that Sennacherib's first or successful invasion was in 701 B.C., which would be the first year of the successor of Zet, if Y were 19. As Zet reigned beyond a later invasion, this is impossible; and consequently no other value of Y is admissible than 7. This gives for the accession of the dynasty 778 B.C., and accords with the statement of Manetho, following the name of the first king, *ἐφ' οὗ ὀλυμπιὰς ἤχθη πρώτη.* This remark, though it would have been true if the dynasty had commenced in 790 B.C., would not have been likely to be made. Its appositeness arises from the accession of Petubastes being almost immediately followed by the celebration of the first Olympiad. If Y were 69, or were 57, it is manifest that the remark would not be true at all.

40. We are now in a position to see the object of the division of the eighteenth dynasty. Manetho stated that it lasted 162 years to the death of Amenophis, and 45 years afterwards. Lepsius and others admit that the duration of the eighteenth dynasty after the death of Amenophis was 45 years; and there was good reason for distinguishing this unhappy period of civil war, inflamed by religious fanaticism, during which the foreign conquests of Egypt were lost, from the prosperous and glorious period which preceded this event. It is remarkable too, that the lists of Josephus and Eusebius, which were composed after 186 years had been added to the duration of this dynasty, carried it down to a king whom they called Amenophis, namely, Menephthah, the son of Ramuss II. They made the period, which according to Manetho's genuine list extended to the death of Amenhotep III., extend to the death of Menephthah.

41. The original list of Manetho was therefore as follows. I give the durations, and the first and last years of each dynasty in years of the new kingdom, and in years before Christ.

		YEARS OF AHMÔS.	YEARS B.C.
Eighteenth dynasty to the death of Amenophis	162	1—162	1531—1370
Later reigns thereof	45	163—207	1369—1325
Nineteenth dynasty	149	208—356	1324—1176
Twentieth dynasty	74 or 178	357—534	1175— 998
Twenty-first dynasty	121	431—551	1101— 981
Twenty-second dynasty	202	552—753	980— 779
Twenty-third dynasty	7 or 89	754—842	778— 690
Twenty-fourth dynasty	44	761—804	771— 728
Sum of the dynasties	990		
Twenty-fifth dynasty	44	805—848	727 — 684
Twenty-sixth dynasty	158	849—1006	683 — 526

In the recovery of this list, no use whatever has been made of any monumental evidence. It is obtained exclusively from the numbers transmitted to us by the Syncellus, as those which

he found in the Old Chronicle and in the works of Africanus and Eusebius. And in the mode of procedure by which this original list has been recovered, there is scarcely anything which is at all arbitrary. The only doubts that can be entertained are whether 158, rather than 157 or 159, was the duration assigned to the twenty-sixth dynasty, and whether 121 or 130 was that of the twenty-first. The effect of supposing it to be 130 might be to bring down the date of the accession of Ahmôs nine years; for in that case, in order to maintain the summation of 990, we must subtract nine years either from the twenty-second dynasty, which would bring down the date of Shishonk's accession to 971 B.C., leaving the earlier and later dates as they stand; or from the twentieth, which would require that 65 be substituted for 74 as the interval between the accessions of the twentieth and twenty-first, which change again would require that 113 + 82 = 195 years be subtracted from 348, in place of 186, and would thus bring down the accession of the eighteenth dynasty by nine years. The monumental eclipse of the twenty-second dynasty appears to me to furnish conclusive evidence in favour of the date 980 B.C.; and the consideration of Manetho's lengths of the several reigns has led me to prefer the earlier to the later date of the accession of Ahmôs, and therefore to prefer 121 to 130. Besides, I have given a plausible reason for corrupting the former of these numbers into the latter, and I can see no reason for a change in the opposite direction.

42. Assuming then that these doubtful points, which very slightly affect the result of my criticism, have been correctly decided, I proceed to test the correctness of my restoration by monumental evidence. There are three points to be specially considered, *viz.*, the Ethiopian synchronisms with Biblical history, the monumental eclipse of the twenty-second dynasty, and the Sothic date of Thothmôs III. I will consider these in the order in which I have named them, and first:—My position respecting the portion of Manetho's list which relates to the twenty-fifth and twenty-sixth dynasties is, that while it is chronologically true, it is for a period of 41 years historically false. He omitted to distinguish the government of Tirhakah as ruler of Ethiopia from his reign as king of Egypt; and he introduced into his list the names of three kings at the head of the twenty-sixth dynasty, who were not kings of Egypt in any sense.

43. To make this matter plain, I will give a detailed chronology of the period which intervened between the close of the twenty-second dynasty and the accession of Psamitik I., distinguishing by brackets those portions in which Manetho deviated from the truth:—

B.C.	DYN. XXIII.		DYN. XXIV.
778	Petubastes.....	40	
	First Olympiad.		
771	———————————		Bocchoris, 44.
738	Osorkon.....	8	
730	Psamût	10	DYN. XXV.
727	———————————		Sabacon, the Ethiopian, conquered Egypt
720	Zet.....	31	and burned to death Bocchoris, 12.
715	———————————		Sebikos, 12.
703	———————————		Tarakos came with an army out of Ethiopia and slew Sebikos, [20].
690	Last year of Zet.		

DYN. XXVI.

[683 Stephinates..... 7
676 Nechapsos 6
670 Nekao..... 8]
662 Psamitik I.

Chronologically there is no error here, because the interval between Tahraka's overthrow of the first Ethiopian dynasty and the accession of Psamitik I. is correctly given as 41 years, but *historically* there is a great error. When Tahraka overthrew Shebetok, he did not succeed him as king of Egypt, but contented himself with the crown of Ethiopia, which he assumed, restoring Zet, or Seti III., to the throne from which his ancestor had been expelled by Bocchoris, during whose reign, and the reigns of Shebek and Shebetok, they were confined to the marshes of the Delta. Probably his reason for adopting this course was that an oracle had limited the rule of the Ethiopian kings over Egypt to fifty years, and that twenty-four of these had already expired when he obtained the Ethiopian kingdom. Accordingly he allowed Seti to reign to his death, on which event he assumed the double crown of Egypt; his first year as king being fourteen years after his conquest of Shebetok, or 689 B.C. He reigned twenty-six years, completing the fifty allowed by the oracle, and then withdrew to Ethiopia. One year of dodecarchy or interregnum intervened, and then Psametik assumed the royal title; but some years probably elapsed before he was generally recognized. As respects actual sovereignty, therefore, as recognized in Memphis, the succession stood thus :—

778 B.C. Petubastes.
771 „ Bocchoris, who drove Petubastes to the marshes, and was himself taken prisoner and burned by
727 „ Shebek the Ethiopian.
715 „ Shebetok his son.
703 „ Zet restored by Tahraka, an Ethiopian chief, who slew Shebetok. He would, however, reckon his regnal years from the death of his father, calling that which was really his first his eighteenth.
689 „ Tahraka, king of Ethiopia, becomes king on the death of Zet.
663 „ Interregnum, Tahraka having retired to Ethiopia.
662 „ Psamitik I.

Here everything is consistent with the Second Book of

Kings, and with the cuneiform inscriptions. The embassy of Hoshea to So (Shebek) falls in his second year, and the invasions of Sennacherib, the first of which was in 701 B.C., find a king of Egypt, "a bruised reed," weak and unable to protect himself, and a king of Ethiopia his powerful protector. This king, the cotemporary of Sennacherib, is called by Herodotus Sethos, evidently the same name as Zet, and as Seti, a well-known name in the nineteenth dynasty.

44. Thus far I believe to be certain; and to disprove it would be to overthrow my arrangement of the chronology. I âm now going to state what I believe to be true, but what I do not consider quite so certain, and what may be disproved without affecting the truth of my arrangement. I believe that this Seti III. is the king whose titles are given in the *Königsbuch*, No. 618, from a stèle in the Louvre (C 100) where he is commemorated along with his daughter Mûtiritis (No. 620). So far as I can judge from the description given by others, the former part of the king's name is obliterated precisely in the same manner as the first element in the name of Seti I. and II. The defacement was not intended as a dishonour to the king but to the god, and was probably in every instance where it occurs the work of the Persians. Lepsius identifies this Mûtiritis with a princess of that name, who became the wife of a man named Petamon, and from whom one of the wives of Ahmôs the Saite was descended in the fourth generation. This accords well enough with his view as to the name of her father being Pankhi, and as to the time when he lived. It does not, however, agree with my view; as it is scarcely probable that only six generations intervened between Seti III., who became king in 720 B.C., and Psamitik III., son of Ahmôs, who became king in 525 B.C. It is my belief that Lepsius confounds two princesses, of whom one was the granddaughter of the other. Mûtiritis, of the stèle in the Louvre, daughter of Seti III., I suppose to have married Kashto, who may have received the title of king in the lifetime of his father-in-law, and been the second of the "kings of Egypt" mentioned by Sennacherib as existing at the time of his invasion. Their daughter Amuniritis was the wife of Pankhi, who was an Ethiopian, perhaps the son of Tahraka; and this couple had two daughters, Shapenap, wife of Psamitik I., and Mûtiritis, wife of Petamun, whose son and grandson were both born in the reign of, and called after, their maternal uncle by marriage. The great-granddaughter of the one sister, and the granddaughter of the grandson of the other, were both married to Ahmôs, who thus acquired a title, in their right, to the throne which he usurped.

45. Although genealogies do not furnish evidence of dates that can be depended on for accuracy, they often afford good approximations. It so happens that in connexion with the royal pedigrees of this period, there are two personages, the dates of whose births are determined within a year, or at most two years, by the evidence of their names; and from these we may, by allowing twenty-five years to a generation (see § 3), approximate to the reigns of others who are genealogically connected with them. The two persons whose births are thus known were king Apries and his half-sister, the wife of Ahmôs, whose coffin is in the British Museum. The former must have been born in the reign of his great-grandfather, Psamitik I., whose throne-name was given to him as his family name; and he could not have been born long before its close, because his grandfather made a campaign the year after his accession, which it cannot be supposed that a very old man would do. If we say 610 B.C., we cannot be above two years astray in the time of his birth. His half-sister was born, as her name indicates, during the reign of Psamitik II., which only lasted five years. Placing her birth in the middle of the reign in 591 B.C., we cannot be above two years astray. We have thus approximately the dates of the births of the Saitic kings, and of the descendants of the elder dynasty, as follows:—

K. Psamitik I.	b. c. 685 B.C.	lived to c. 76.
K. Nekau	b. c. 660 ,,	lived to c. 67.
K. Psamitik II....	b. c. 635 ,,	lived to c. 47.
K. Wah-het-Phrâ..	b. c. 610 ,,	dethroned c. 41.

Seti III.	b. c. 741 B.C.	lived to c. 52.	
Mûtiritis	b. c. 716	m. K. Kashto.	
Amuniritis	b. c. 691	m. K. Pankhi.	
Shapenap.....	b. c. 666	m. K. Psamitik I.	Mûtiritis m. Petamun.
Nitokrit, sen.	b. c. 641	m. K. Nekau	Wah-het-Phrâ.
Nitokrit, jun.	b. c. 616	m. K. Psamitik II.	Psamitik.
Ankh-nes-nofer-het-Phrâ..	b. c. 591	m. K. Ahmôs	Petenit.
	b. c. 566		Tentkheta m. K. Ahmôs.
			K. Psamitik III.

The birth of Psamitik was, probably, considerably less than twenty-five years after 566 B.C. We may be sure that Ahmôs would marry his mother as soon as she had attained a sufficient age; and Psamitik had children when Egypt was conquered in 525 B.C. (Herod., iii., 14), who must have been five or six years old at least. We can readily suppose that the descendants of Mûtiritis were some years older than those of Shapenap, on the same line with them.

The above pedigrees are fully established from Kashto downwards. The point in which I differ from Lepsius, De Rougé,

and others, is, that they consider the king with the partly defaced name, mentioned with his daughter on the Louvre stèle, c. 110, to be Pankhi, the son-in-law of Kashto, while I consider him to be Seti III., his father-in-law.

46. The genealogy and chronology, as I have given them, are evidenly in perfect harmony; and this harmony will continue if we trace back the twenty-third dynasty; Psammus being born c. 766 B.C., Osorkon, c. 791, and Petubastes, c. 816. This last would thus be about twenty-eight years of age when he came to the throne, and would have lived till he was seventy-eight. I see no reason to doubt that he was the son of Shishonk IV., the last king of the twenty-second dynasty Here, and in several other instances, I conceive that Manetho made a new dynasty, when there was a change of the dimensions of the kingdom, though there was no change in the reigning family. Petubastes was driven out of the capitals and the principal part of Egypt by Bocchoris, and could not, therefore, be regarded as continuing the prosperous twenty-second dynasty, which held the whole kingdom. Perhaps he had the misfortune to be blind, and that this fact contributed to the success of the usurpation. At any rate, I think there can be little doubt that his retreat to the marshes of the Delta, and the subsequent restoration of his great-grandson on the overthrow of Shebetok, were the facts which, distorted and embellished by the informants of Herodotus, were the basis of his fabulous history of Anysis (ii., 137, 140). Herodotus represents Anysis himself as restored, and Sethos as his successor; but in reality, his Sethos was the restored prince, and was the third in descent from the exiled one.

47. I will now proceed to consider the eclipse which is recorded in an inscription of a king Takelut, of the twenty-second dynasty, to have taken place on the 24th Mesore, in the fifteenth year of his father. This eclipse seems to have been first noticed by Brugsch. I am not aware that any Egyptologer has disputed his interpretation of the passage, but its importance as settling the chronology of the period has not been generally recognized. This record of an eclipse has been ignored or pooh-poohed by almost all who have had occasion to notice it; and for this I can assign no other reason than that its having happened according to the inscription is inconsistent with all the chronological systems that are current among Egyptologers. The following propositions are indisputable:—

1. On the 24th Mesore of the Egyptian civil year which began 17th April, 946 B.C., that is, on the 4th April, 945 B.C., the moon was totally eclipsed.

2. On no other 24th Mesore than this, could the recorded eclipse have taken place.

3. Takelut I. was son of Osorkon I., who was son of Shishonk I., the founder of the dynasty, who, according to Africanus and Eusebius, reigned twenty-one years.

From the first and second of these propositions, it follows that, if the record be *true*, the eclipse must have been that of the 4th April, 945 B.C. No other eclipse can be put forward, except on the hypothesis, that the sculptor of the inscription was careless, and wrote the 24th Mesore by mistake for some other date.

48. This hypothesis has been put forward by Mr. Basil H. Cooper, in the *Athenæum;* he would read the 28th Mesore, on which day in the year which began 24th March, 852 B.C., namely, on the 16th March, 851 B.C., there was an eclipse of the moon visible in Egypt. Mr. Cooper felt himself constrained to make this correction of the Egyptian text, through his dependence on Lepsius's arrangement of the kings in the twenty-second dynasty, according to which the Takelut who recorded this eclipse was Takelut II. Of the correctness of that arrangement, however, Lepsius offers no positive proof. Mr. Cooper ought to have recollected his own arguments against the *correction*—rather the *corruption*—of the date of the rising of Sothis, in the inscription of Thothmôs III. at Elephantine, which Lepsius and Bunsen had advocated. It is to me utterly inconceivable, that in the record of any event of which the date is given, the writer of the inscription should put down the date incorrectly. The case of the error committed by the sculptor of the Rosetta stone in respect to the month in which the king came to the throne, is by no means a parallel case. The Rosetta stone was one of many hundred copies of a decree which would only be in force during the life of the king, in whose honour it was made. The general fate of these copies would be, that after the king's death they would be thrown aside as useless, if they could not have the inscriptions cut away so that they might receive new ones. The natural consequence of this would be, that the execution of these stèles would be committed to inferior workmen, and that those employed would be careless as to mistakes. If one of them saw that he had put down a wrong word, he would not take the trouble to correct it. On the other hand, the Karnak inscription which we are now considering was the single record of what it commemorated; the account of what had occurred was inscribed on the walls of the temple *in perpetuum rei memoriam;* and if there had been a mistake in the date, it would have been immediately observed and corrected. I

should observe also that the mistaken date on the Rosetta stone is not in the decree itself, but in a recital, and that it relates to a point in the recital which is absolutely *immaterial;* whereas, when a date is given in a historical inscription, it is probably the most material information in it. Mr. Cooper saw clearly the absurdity of supposing that the sculptor of the inscription at Elephantine had given a false date, and he ought not to have admitted so readily as he does that there was a false date in the inscription of Takelut at Karnak.

49. Unless, therefore, there can be positive proof produced that the eclipse of the 4th April, 945, *could not possibly* have been the eclipse of the inscription, I contend that we are bound in common honesty to admit that it was so; and that all presumptions to the contrary, drawn from doubtful hypotheses which are inconsistent with it, ought to fall down before this distinct record. I have already discussed this matter in § 10, to which I refer; and I now remark that there are three distinct pretended impossibilities,—in reality, inconsistencies with received theories, which are appealed to, as proving that this eclipse of 945 B.C. could not be that intended. First, it is alleged that this eclipse could not have been seen by the Egyptians. If the moon's acceleration be so great as the Astronomer Royal, Hansen, and others imagine, the moon must have been completely disengaged from the earth's shadow before she rose in Egypt. Secondly, it is alleged by Lepsius, and by Egyptologers generally after him, that the writer of this inscription was Takelut II., and not Takelut I., as I contend. If this were true, the date of 945 B.C. is, of course, inadmissible. Thirdly, it is alleged that the Biblical date of Rehaboam's accession, 975 B.C., is too early, and that Shishonk's accession, which preceded his, could not have taken place till the latter half of the tenth century before Christ. Now, the fifteenth year of Osorkon I., the father of Takelut I., must be thirty-five or thirty-six years after the accession of Shishonk; consequently, the eclipse could not have been in that regnal year of his, unless the accession of the twenty-second dynasty was in 980 B.C. or 981 B.C. My reasons for preferring the date 980 B.C. must be deferred till I come to consider the chronology of the separate reigns. Now, I deny that any one of these three alleged impossibilities is a real one. I contend that not one of the hypotheses, with which the supposition that the eclipse occurred as it is recorded that it did is inconsistent, is sufficiently established to cause us to reject a testimony like that of this inscription. I hold that the record ought to be received as it stands; and that, *consequently*, the co-efficient of the moon's acceleration must be diminished, so

as to admit of this eclipse having been seen by the Egyptians; the Takelut of the inscription must have been the first king of that name; and all the schemes that have been proposed for bringing down the building of the temple, or the accession of any of the kings of Judah below the dates given in the margin of the English Bible, must be rejected. The Astronomer Royal and his numerous followers, Lepsius and other Egyptologers, as well as Sir H. Rawlinson and Mr. Bosanquet, must all abandon their respective theories, which are inconsistent with a well-attested astronomical record. As to the two latter gentlemen, what I have said in § 10 will suffice; but I have something to add in reply to the Astronomer Royal and Lepsius.

50. The supposition that the moon's acceleration has been greatly exaggerated by Hansen in his tables is by no means a new one, adopted by me in order to maintain the credit of this eclipse. I have held this opinion, and advocated it whenever I have had an opportunity, for the last six years and upwards. At the Manchester meeting of the British Association, I brought forward what appeared then, and still appears to me, to be conclusive evidence of this fact. I refer to pages 22—24 of the Report for 1861, where I refer to two lunar eclipses, recorded by Ptolemy as having taken place in 720 B.C., in both of which the eclipse is recorded to have taken place considerably after the time when it should have happened, according to Hansen's tables; the interval between the calculated and the recorded time being, in one instance, a full hour. I stated in the paper that I did not wish the calculations to be taken on my authority; I wished that others should make similar calculations. I am now enabled to state that such calculations have been made, and that those which I made have been found to be perfectly correct. The Astronomer Royal (whose paper read at the same meeting, entitled "Remarks on" mine, p. 12, is not a *reply* to mine, which the Astronomer Royal had not heard) referred me to a paper of Dr. Hartwig, in No. 1241 of the *Astronomische Nachrichten*, in which he gives a calculation from Hansen's tables of the different eclipses mentioned by Ptolemy. With respect to the eclipse of —719 March 8, he agrees with my calculation to a minute. He places the middle of the eclipse at 11*h.* 13*m.*, and the end at 12*h.* 7*m. mean* Babylonian time. The equation of time was then 14*m.*, which would give 10*h.* 59*m.*, and 11*h.* 53*m.* for the middle and end of the eclipse. Ptolemy's statement is, that the middle of the eclipse was ἐπ' ἄκρῳ τῷ μεσονυκτίῳ, at the very instant of midnight, at that marked period when the sixth of the two-hour clepsydras had run out, and the seventh was set a-going; the first of the clepsydras

having been set a-going at apparent noon. This is, in its nature, an observation on the accuracy of which very great dependence can be placed. It could not have been more than a few minutes astray, and it is evident that it was recognized both by Hipparchus and by Ptolemy as the very best observation that they had. It was that which they both compared with eclipses observed in their own times, in order to determine the mean motion of the moon. And yet Dr. Hartwig, when he should produce Ptolemy's statement of what was observed, for comparison with what he had calculated, says that the middle of this eclipse was, according to Ptolemy, "unbestimmt, um mitternacht,"—*undetermined, about* midnight! I question if a more reckless misstatement of adverse testimony was ever made by the advocate of a desperate cause. In reality, the time when the eclipse was stated to have been, and must have been within a mere trifle, *greatest,* was 61*m.*, according to Dr. Hartwig's own calculation after the eclipse ought, according to the tables, to have been greatest, and 7*m.* after it ought to have emerged from the shadow. Here we have, as I contend, *conclusive* evidence that the co-efficient of T^2 in the moon's mean elongation is *much* less than Hansen supposes. If the whole error were due to this cause, it would amount to 2″·9; but we may well suppose that there was a considerable error also in the place of the perigee, and this may have produced a change in the time of opposition, either in the same direction as the change caused by the error in the acceleration or in the opposite direction. In the former case, a less error than 2″·9 would suffice; in the latter, we must admit a greater error than this.

51. Having made these preliminary observations, I now proceed to speak of the eclipse of —944 April 4. The tables of Hansen do not extend beyond —800; but by the formulæ given in the preface, I have calculated the moon's place for this eclipse, and also that of the sun, on the supposition that the eccentricity was then ·017915, which is, I believe, what Hansen would make it to be. According to these data, the opposition of the sun and moon would take place on the 4th April —944 at 0*h.* 41·8*m.* G. M. T.; adding 2*h.* 5*m.* for difference of longitude, and subtracting 6·5*m.* for equation of time, the opposition would fall at 2*h.* 40*m.*, apparent time at Memphis, or about, as I calculate, 3*h.* 23*m.* before the moon would rise. The eclipse would continue 1*h.* 40*m.*, or thereabouts, after the opposition, so that it would be over, *according to Hansen,* 1*h.* 43*m.* before the moon rose. The question to be considered is—can we admit such an error in the tables, consistently with the record, as to the eclipse of 8th March —719, when the error was only 1*h.* 1*m.*? It must

certainly be acknowledged, that we cannot, if the mean longitude of the moon herself be the only thing in which the tables are at fault. In the eclipse of —719, an error of a second in the co-efficient of T^2 in the moon's mean longitude would produce an error of about 21*m.* 3*s.* in the time of opposition; while in that of —944, it would only produce an error of 22*m.* 57*s.*; so that 61*m.* in the former eclipse, which is the proved error of the tables, supposing the observation to be *accurate*, would correspond to an error of only 66·5*m.* in the latter. There may have been a slight error of observation in the eclipse of —719; the middle of the eclipse may not have been reached for some 5*m.* after apparent midnight; but about 72*m.* is the outside that can be allowed for the error in —944, corresponding to the observed error in —719. Let us suppose, however, that, as I suggested in § 50, there was an error in the place of the moon's perigee, which would retard the time of opposition by about 10*m.*, this would require that the error in the mean place of the moon, which is in the opposite direction, was greater than I have supposed. It will be convenient to assume the co-efficient of T^2 in the moon's mean elongation to be 8″·5. This supposes an error in the time of opposition of 77*m.* 43*s.*, which is about 11*m.* 43*s.* greater than the observation admits. Now, in the eclipse of —944, the error of 77*m.* 43*s.* would be increased to 84*m.* 44*s.*; while the error caused by the perigee would have its direction changed, the moon being in the opposite part of its orbit; and instead of being —11*m.* 43*s.*, would be + 11*m.* 7*s.*, so that an error of 96*m.* is admissible. The error of the tables should, however, as we have seen, be at least 103*m.*, supposing the observation to have been in the longitude of Memphis; but is it quite certain that it was so?

52. We know that Shishonk, the founder of the twenty-second dynasty, overran the kingdom of Judah; and we may naturally suppose that he retained some frontier fortress, which might serve as a point of support to the Egyptians in future wars. Any such fortress must be 14*m.* of time eastward of Memphis, and it might very well be 15*m.* The moon might have risen *there* 7 or 8*m.* before the termination of the eclipse; and for aught that we know to the contrary, the record may have referred to this point. Indeed, we have direct evidence that about the time of this eclipse, the king of Egypt was at the head of an army in Palestine. It is stated in 2 Chron. xiv. 9, that Zerah, the Ethiopian, who has been pretty generally identified by Egyptologers with Osorkon I., father of Takelut I., was defeated by king Asa at Marisha, about 15*m.* eastward of Memphis. In the following chapter, it is stated that after pur-

suing the invaders, and collecting an immense spoil, Asa effected a religious reformation, and gathered the people together at Jerusalem, in the third month of his fifteenth year. According to the canon of kings of Judah, as given in the Books of Kings, and as generally received by the early Christians (when corrected by eleven years, falsely inserted at the end of the canon to make up the seventy years' captivity, according to the misinterpreted prophecy), the first year of Asa was that which began in the spring of 959 B.C. (see § 16), and his fifteenth was that which began in the spring of 955 B.C., fifteen days after the eclipse. The assembly at Jerusalem was, in all probability, at the new moon, seventy-four days after the eclipse; and the interval between the battle and the assembly could not be much less, if at all less, than two months. It is, therefore, reasonable to suppose that the eclipse happened when the king of Egypt was in Palestine, marching eastward, not many days before the battle; and if so, the eclipse must have been observed there. The record by no means implies that the eclipse was total. Possibly, it implies no more than that the moon was obscured, as it might be by the penumbra, just after it had emerged from the dark shadow; and if the moon rose, thus darkened, to the army in Palestine, it might appear worthy of notice, more especially when it was found that this phenomenon had not been seen in Egypt. Unfortunately, the text of the inscription at Karnak is in a very mutilated state, so that while the date and the record of the moon being obscured at that date are well preserved, the connexion in which this fact was recorded is wholly lost.

53. I now dismiss this discussion of the eclipse, which professed astronomers may take up if they like. I have considered it merely in a chronological point of view. I have, I think, shewn (as I sought to do) that there is no *absolute impossibility* in the eclipse of 4th April —944, having been observed as stated in the inscription of Takelut; its having been observed is not inconsistent with Ptolemy's record of the eclipse of 8th March —719, nor, I may add, with his record of that of 1 Sept. —719, nor with the record of the eclipse of Agathorles. All these records are consistent with the eclipse of —944, having been observed in Palestine. The only supposed records which I know to be inconsistent with it, are the pretended eclipse of Larissa and the eclipse of the Lydian war, if it were that of —585. Both of these records, however, I hold to be fanciful, and of no authority. The latter involves a decided anachronism. Now, there being no *absolute impossibility* in this eclipse having taken place as it is recorded that did, I contend that the record ought to be accepted as evidence that it did take place. It would in my

opinion be contrary to sound criticism to suppose that an obscuration of the moon, recorded to have been observed, did not really take place, or had some other cause than the earth's shadow.

54. I now come to the objection that is grounded on Lepsius's arrangement of the kings of the twenty-second dynasty. I admit that if, as Lepsius supposes, the Takelut under whose father the obscuration of the moon is said to have happened, were Takelut II., an eclipse could not have happened at the time indicated; but I maintain that Lepsius's arrangement is an arbitrary one, and is incorrect. In order that it may be seen in what respect my arrangement differs from his, I will give in the first place so much of the arrangement as I adopt.

First king.....	Shishonk I. (Ra-hut-h'eper, sotep-en-Ra).
Second king, his son	Osorkon I. ?
Third king, his son.....	Takelut I. ?
Fourth king, his son	Osorkon II. ?
Fifth king	Shishonk II. (Ra-hut-h'eper, sotep-en-Amun).
Sixth king	Takelut II. ?
Seventh king	Shishonk III. (Ra-t'user-mâ, sotep-en-Ra).
Eighth king.....	Pemai (Ra-t'user-mâ, sotep-en-Amun).
Ninth king, his son	Shishonk IV. (Ra-âa-h'eper).

Four kings are known by direct monumental evidence to be sons of their predecessors; Lepsius supposes that all were so; and I am disposed to agree with him. Twelve generations, averaging twenty-four years, would bring us from Shishonk I., born about 1029 B.C., down to Seti III., born about 741 B.C. The age of Shishonk I. at his accession may be estimated pretty closely. He was not too old to make a warlike expedition in his sixth year, and to reign for twenty-one years; and yet he was sufficiently old to have a son grown to man's estate, to whom he preferred giving the daughter of Psusennes in marriage, to marrying her himself. We cannot suppose him to have been much over or under fifty. Possibly he was somewhat older, as he had a son older than Osorkon, who died before his father.

55. Now, the question at issue between Lepsius and his followers and me relates to the throne name of the two Osorkons and the two Takeluts. There is a representation of a king accompanied by a prince, his son, at Karnak (Leps., *Auswahl*, 15), who is certainly the same Takelut in whose reign the inscription recording the eclipse is dated, because he has the same throne name Ra-hut-h'eper, sotep-en-Ra. The question at issue is,—Was this Takelut I. or II.? The inscription speaks of the prince (who was dead, and apparently not long dead, when the inscription is dated, the eleventh year of Takelut, first of Tobi), as "first prophet of Amun (with other titles): Osorkon deceased,

born of the king's principal wife Karamama-merit-Mût (may she live!), daughter of the first prophet of Amun (with other titles) Namerut, royal son of Osorkon, son of Bast (may he live!)" Takelut himself is called son of Hisit: and in another inscription in the same plate of the *Auswahl*, that from the Nile statue in the British Museum, Osorkon I. is named without any such designation as son of a goddess. It is by the contents of these two inscriptions that the question is mainly to be decided. Lepsius and I each draw a conclusion which would settle the question at issue, if the premise which we respectively assume were true: but I deny the truth of his; and he would probably deny the truth of mine, which he does not notice. Other arguments only tend to shew that one hypothesis is more probable than the other; but these two lead to a certain conclusion. Of course, one at least of the premises adduced by Lepsius and me must be false.

56. Lepsius assumes that the addition to a family name of Sa-Hisit, Sa-Bast or Sa-Nit, *i.e.*, "son of Isis, Bast or Nith," was made with a view to distinguish the king so designated from a previous king who bore the same family name. Granting this to be the case, the Takelut and Osorkon of this inscription must be respectively the second of their name: I meet this argument by denying the truth of the proposition assumed by Lepsius. He admits himself, that the title which he supposes to be distinctive is often omitted, and that the names of the two goddesses are indiscriminately used. All that he can rest on is, then, the supposed fact that this addition is never made to the first king with any family name. It is curious, however, that he has himself furnished evidence contradicting this assertion. In the *Königsbuch*, No. 576, he gives the family name of Takelut I., with the addition "son of Isis." This is taken, I believe, from some leathern fragments at Berlin. Here, then, is an instance, given by himself, in which the two kings who alone bore the family name of Takelut are alike called "son of Isis" in their family name; the two different throne names accompanying the very same family name. Again, in the twenty-sixth dynasty, Ahmôs is always called son of Nît; and I can scarcely think that this was to distinguish him from a king who reigned about a thousand years before him. I also find the same addition to the name of Psamitik I. (Sharpe, i., 114.) In this plate we have the funeral vases of a general named Wah-het-Phrâ em k'u (or em tiou-en-Ra, as it was formerly read), whose name implies, as I conceive, that he was born when the Pharaoh, or Sun-god, so distinguished, whom we know to have been Psamitik I., was setting in glory. Now, the father of this general, whose

funeral vases are in the Louvre, is called Psamitik-sa-nît; and it is a matter of necessity that it was Psamitik I., after whom he was called; and consequently that king must have borne this title. It may occur to some that the younger general was called after Apries, in which case the elder might have been called after Psamitik II.; but in the first place, the family name of a king (which Wah-het-Phrâ was of Apries), was never used in this connexion; and in the second place, the death of Apries was of such a nature that we cannot suppose it possible that a young courtier should give his name to his son, commemorating a dethroned and murdered king, as if he had died in honour after a prosperous reign. No name could have been more appropriate than this for one who was born in 609 B.C., and it would have been hard to select one less so for a person who was born about 569 B.C. Nor again is it at all likely that if a courtier at the last date should have been foolish enough to give his son this name, both he and his son would have been successively advanced by Ahmôs to the rank of general. From all that has been said, I feel fully convinced that the designation of a king as son of a goddess was purely honorary, and by no means intended to distinguish him from a previous king of the same family name.

57. The general principle which I assume is, that the addition of "May he live!" to a king's name implies that he is alive. If so, Osorkon, mentioned in this inscription, must be the father, and not the grandfather of Takelut; and, of course, the Takelut here named must be the first of the name. In order to disprove this it would be necessary to produce an instance in which this addition is made to the name of a deceased king; but I contend that, even if such an instance could be adduced, though this conclusion would not necessarily follow, it would be highly probable that it was true. The only instances in which I have *seen* this addition made to a king's name, where his being alive was doubtful, are a tablet of the reign of Amen-em-hê II., already referred to, where the fact of the king so qualified being alive appears to me certain; the present inscription, where it is not impossible, for Osorkon, had he lived, could not be above eighty years old at the outside; and the inscription on the Nile statue, where Psusennes, the last king of the twenty-first dynasty, whose daughter was married to Osorkon I., is thus qualified. This inscription may very well have been made in the third or fourth year of Osorkon I., the twenty-fourth or twenty-fifth of the twenty-second dynasty; and there is no improbability in Psusannes having survived his dethronement twenty-five years, if he had been allowed to die a natural death. I have

seen no other inscription where the phrase occurs, and where there is any ground for doubting that the king was alive. I have *read,* however, of one of the Apis stèles, in which, if the statement be correctly given, there is a clear instance of the addition being made to the name of a dead king. I allude to the stèle of the twenty-eighth year of Shishonk III., in which this addition is said to be made to the name of a king Osorkon, who, whether he be first or second, must have been long dead.

58. It is safest, under these circumstances, to consider what is *probable,* assuming for argument's sake that there is no such certainty to be had, as I have been speaking of. In the first place, we have some sort of evidence from the Apis tombs. Mariette gives as successive Apises those who died in the twenty-third of Osorkon II., the fourteenth of Takelut I., and the twenty-eighth of Shishonk III. According to Lepsius, his Takelut I. should be II., whereas, according to my views, his Osorkon II. should be I. According to this view, we must suppose that several Apises intervened between the second and third of the above three; while, according to Lepsius, only one could have done so. It seems improbable, however, that we should here have the complete series; and if there be a gap for one, it may have included several. According to Africanus, Takelut II. only reigned thirteen years; but as the duration of the dynasty was shortened from 202 to 120 years, it is likely enough that both the fifteen years of Osorkon and the thirteen of Takelut are too small. I suspect the true numbers were twenty-five and twenty-three. At any rate it is improbable that no Apis should have been buried in the reign of Shishonk III., till his twenty-eighth year. While, then, I admit that the Apis monuments render Lepsius's theory rather more probable than mine, I think that the probability in favour of mine, derived from the argument in the preceding §, very nearly, if not altogether, counterbalances this.

59. The question is then to be decided, as it appears to me, by fitting the several personages mentioned in the inscriptions as connected with the royal family into their places, in the outline already given, and seeing which can be made to fit there in best accordance with the known length of generations. I will give a list of the persons mentioned who have to be placed, with what I suppose to have been their parentages and the approximate times of their births and deaths, and the leading events of their lives. All the dates are B.C. I omit unimportant personages.

1. Shishonk I., b. about 1029, became king 980, took Jerusalem 975, d. 959.
2. Osorkon I., b. about 1005, married daughter of Psusennes in 980, by whom he had two sons, 3 and 5; became king 959; invaded Judæa in 945; reigned alone till 934 [may have lived 10 years or so longer, his son 7 being king.]

3. Namerut, first prophet of Amun, heir of the twenty-first dynasty through his mother; b.c. 979, died soon after his father's becoming king.
4. Karamama, daughter of 3, heiress of the twenty-first dynasty; b. about 959, and was married to her uncle, Takelut I., about 944.
5. Shishonk, born c. 977; became first prophet of Amun on the death of his brother; erected the Nile statue soon after; died before 934.
6. Osorkon (of the Denon papyrus), prophet of Amun, son of 5, born c. 955; died before 934, after his father, but before his grandfather. He was probably murdered.
7. Takelut I., son of 2 by Tamentah'onsu, as Lepsius reads her name, b. about 981; became first prophet of Amun on the death of 5, to the prejudice of the hereditary rights of 6; in 934 became king [alone, or in conjunction with his father]; reigned till 919 at least.
8. Osorkon, son of 7 and 4, born c. 943; was first prophet of Amun, but died in his father's life-time about 924.
9. Osorkon II., son of 7, and a wife, whose name ends in —pes;—the former part has not yet been read,—born c. 957.
10. Shishonk II., son of 9, born c. 933; d. c. 889 or 899.
11. Takelut II., son of 10, born c. 909; reigned c. 889 or 899; d. c. 876.
12. Shishonk III., son of 11, born c. 885; reigned c. 876. Apis died 849; he died c. 824.
13. Shishonk, son of 2, and Karamat, Sam of Phthah, chief priest at Memphis, born c. 970; presided at the burial of an Apis in 937.
14. Takelut, son of 13, was born c. 9[illegible]0, and succeeded his father in all his offices.
15. T'esbast-peru, daughter of 9, and Hisit-em-H'eb, born c. 925.
16. Pet-Hisit, son of 14 and 15, born c. 900, succeeded his father in all his offices. He presided at the burial of an Apis in 851, and was living twenty-six years after, when the next Apis was buried; he was then aged about 75, and had grandchildren grown up.

I need not treat of the descent of Har-pe-son, as it presents no difficulty. He assisted at the burial of an Apis in or about 779, being the sixth in descent from Osorkon II., who was born c. 957. We may suppose him to have been thirty-four years old, and we should have about twenty-four years on an average for a generation.

If any one can point out a flaw in the above arrangement, I will readily acknowledge my error; but at present it appears to me perfectly satisfactory, both as respects monumental evidence, and as respects the ordinary course of human life.

60. I must, however, beg my readers to recollect, that if this arrangement of the dynasty be shewn to be inconsistent with the monuments, or if the grounds on which I have maintained that it was possible for an eclipse to have been seen by the Egyptians in 945 should be proved to be untenable, my restoration of Manetho is not affected by it. I bring forward this eclipse as a confirmation of conclusions at which I have arrived, independently of it. I argue, that as it is almost certain that an eclipse is monumentally recorded to have happened on a specified day, we ought to admit the record to be true unless there be a *certainty,* arising either from astronomical data or from monumental evidence, that the eclipse which appears to be recorded *could not*

have taken place. *Probability* will not do, because the probability that the monumental record was true would outweigh almost any probability that could conflict with it. And be it remembered that if it be proved that the record was *untrue*, its error must be in the *fact* that an eclipse occurred at all; some atmospheric phenomenon may *possibly* (though, I think, *most improbably)* have been mistaken for it: it cannot be in the date; for it is quite certain that, whether what is recorded happened in 945 or not, it could not have happened in any other year. If my eclipse is a good record, my arrangement of the dynasties is verified in the most remarkable manner. If I fail, there is no monumental eclipse at all, and my arrangement is neither verified nor disproved.

61. It is otherwise with the third of the synchronism, which I proposed to consider,—that of the rising of Sothis on the 28th Epipti. It must have risen on that day in four successive years, and there could be no mistake in the observation of the fact. It is certain, too, that the record of the rising on this day belongs to the reign of Thothmôs III. Consequently,—unless we suppose that an Egyptian sculptor inscribed the stone through mistake with a false date; which it is inconceivable that he should do, the stone having been fixed up in a public place, where an error, if it existed, must have been at once observed, and would of course have been immediately corrected,—*consequently*, I say, Thothmôs III. *must* have reigned in the fifteenth century B.C., when only this phenomenon could have occurred. According to my chronology, he would have done so; but not according to Lepsius, Bunsen, and most other Egyptologers.

With this observation I will conclude what I have to say, as respects the dynasties; and unless my system, so far as I have yet exhibited it, shall be proved to be unsound in the interim, I will, D.V., give the dates of the commencement of most of the reigns in the July number of this Journal.

EDWARD HINCKS.

Killyleagh, 29th Nov., 1862.